#### Ameritech Michigan

#### MDF

#### ITEM COST SUMMARY

|  | •  | MDF   |
|--|----|-------|
| Estimated Investments:  Recoverable Material Cost Non-Recov. Material Cost | \$ | 11.87 |
| Installation Cost  |    | 3.10  |
| Total  | \$ | 14.98 |
| Estimated Recurring Costs  |    |       |
| Depreciation   | \$ | 2.02  |
| Cost of Money  |    | 0.94  |
| Income Tax   |    | 0.41  |
| Maintenance  |    | 0.96  |
| Administrative Overhead  |    | •     |
| incremental Expense  |    | •     |
| Other Recurring Expense  |    | •     |
| Ad Valorem Tax   |    | 0.15  |
| Gross Receipts Tax   |    | •     |
| Total Annual Cost:   | \$ | 4.48  |
| Total Monthly Cost:  | \$ | 0.37  |

#### PROPRIETARY

#### Ameritech Michigan

#### MDF PBX GrdSt/Coin

#### ITEM COST SUMMARY

|   |    | MDF PBX<br>GrdSt/Coin |  |
|---|----|-----------------------|--|
| Estimated Investments:  Recoverable Material Cost | s  | 12 48                 |  |
| Non-Recov. Material Cost                          | •  | 12.40                 |  |
| Installation Cost                                 |    | 3.26                  |  |
| <b>-</b>  | •  | 45 74                 |  |
| Total   | \$ | 15.74                 |  |
| Estimated Recurring Costs                         |    |                       |  |
| Depreciation                                      | \$ | 2:13                  |  |
| Cost of Money                                     |    | 0.99                  |  |
| Income Tax  |    | 0.43                  |  |
| Maintenance                                       |    | 1.01                  |  |
| Administrative Overhead                           |    | -                     |  |
| incremental Expense                               |    | -                     |  |
| Other Recurring Expense                           |    | •                     |  |
| Ad Valorem Tax                                    |    | 0.15                  |  |
| Gross Receipts Tax                                |    | -                     |  |
| Total Annual Cost:                                | \$ | 4.71                  |  |
| Total Monthly Cost:                               | \$ | 0.39                  |  |

### PROPRIETARY

### UNBUNDLED LOOP COST OF A TELEPHONE NUMBER

| LINE          | DESCRIPTION   |            |           |
|---------------|---|------------|-----------|
| 1             | NETWORK ADMINISTRATION HOURS - INSTALL                                |            | 1         |
| 2             | CENTRAL OFFICE ACTIVITY HOURS - INSTALL                               |            | 44        |
| 3             | CIRCUIT FACILITIES HOURS - INSTALL                                    |            | 80        |
| <b>4</b><br>5 | COSMOS DATABASE HOURS - INSTALL NETWORK ADMINISTRATION HOURS - REMOVE |            | 3<br>0.25 |
| 6             | CENTRAL OFFICE ACTIVITY HOURS - REMOVE                                |            | 10        |
| 7             | CIRCUIT FACILITIES HOURS - REMOVE                                     |            | 20        |
| 8             | COSMOS DATABASE HOURS - REMOVE  |            | 0.5       |
| 9             | USABLE NUMBERS IN A PREFIX (FWD LOOKING)                              |            | 10,000    |
| 10            | C.O. LINE & NO. ADMIN. (96) M270X                                     |            | 39.19     |
| 11            | C.O. TECHNICIAN (96) P430X  |            | 41.43     |
| 12            | CIRCUIT FACILITIES (96) M270X   |            | 39.19     |
| 13            | COSMOS DATABASE (96) P430X  |            | 41.43     |
| 14            | PROGRAM STORE WORD INSTALLED INVEST.                                  |            | 0.0056    |
| 15            | COST OF MONEY   |            | 0.136     |
| 16            | ANNUAL COST FACTOR 377C (MEGA DMS)                                    |            | 0.4552    |
| 17            | DISCOUNT RATE (MEGA DMS)  |            | 0.824     |
| 18            | LABOR RATE INFLATION FACTOR   |            | various   |
|               | NONRECURRING COSTS  |            |           |
| 19            | NETWORK ADMINISTRATION COST - INSTALL                                 | L1*L10     | 39.19     |
| 20            | CENTRAL OFFICE ACTIVITY COSTS - INSTALL                               | L2*L11     | 1822.92   |
| 21            | CIRCUIT FACILITIES COST - INSTALL                                     | L3*L12     | 3135.20   |
| 22            | COSMOS DATABASE COST - INSTALL  | L4*L13     | 124.29    |
| 23            | TOTAL LABOR COST - INSTALL  | L19L22     | 5121.60   |
| 24            | LABOR INFLATION FACTOR FOR 7 YEARS                                    |            | 1.357     |
| 25            | NETWORK ADMINISTRATION COST - REMOVE                                  | L5*L10*L24 | 13.3      |
| 26            | CENTRAL OFFICE ACTIVITY COST - REMOVE                                 | L6"L11"L24 | 562.21    |
| 27            | CIRCUIT FACILITIES COST - REMOVE                                      | L7°L12°L24 | 1063.62   |
| 28            | COSMOS DATABASE COST - REMOVE   | L8*L13*L24 | 28.11     |
| 29            | TOTAL LABOR COST - REMOVE (FUTURE AMT)                                | L25L28     | 1667.24   |
| 30            | PV of FUTURE AMT FACTOR (1,11.5%,7yr)                                 |            | 0.46674   |
| 31            | PV OF REMOVAL COSTS   | L30°L29    | 778.17    |
| 32            | TOTAL LABOR COSTS   | L23+L31    | 5899.77   |
| 33            | NONRECURRING COST PER NUMBER  | L32/L9     | 0.59      |

#### PROPRIETARY

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### UNBUNDLED LOOP COST OF A TELEPHONE NUMBER

| LINE | DESCRIPTION                                |             |          |
|------|--|-------------|----------|
| 34   | NONRECURRING COST PER NUMBER (LABOR)       | L33         | 0.59     |
| 35   | USEFUL LIFE IN YEARS                       | 400         | 7        |
| 36   | ANNUITY FACTOR (PV 1,INT 11.5, TERM 7 YRS) |             | • 0.1774 |
| 37   | ANNUAL RECURRING COST PER NUMBER (LABOR)   | L34*L36     | 0.10467  |
| 38   | ANN COST FOR PROG STORE WORD               | L14         | 0.0056   |
| 39   | ANN COST FOR PGM STORE WORD w/discount     | L38*(1-L17) | 0.00099  |
| 40   | TOTAL ANNUAL COST PER NUMBER               | L37+L39     | 0.10566  |
| 41   | TOTAL MONTHLY COST PER NUMBER              | L40/12      | . 0.01   |

#### PROPRIETARY

### UNBUNDLED PORT INTERCEPT COST SUMMARY

| 1. | OPERATOR ANNUAL WAGES AND EXPENSE     | ES ·        | \$257,423   |
|----|---------------------------------------|-------------|-------------|
| 2. | . INTERCEPT TRUNK MILEAGE ANNUAL COST |             | \$16,182    |
| 3. | INTERCEPT CXR TERMINATIONS ANNUAL C   | COST        | \$663,735   |
| 4. | INTERCEPT COE SW ANNUAL COST          |             | \$252,812   |
| 5. | TOTAL INTERCEPT EXPENSE               | L1+L2+L3+L4 | \$1,190,152 |
| 6. | TOTAL ACCESS LINES                    |             | 4,890,240   |
| 7. | ANN INTERCEPT COST PER ACCESS LINE    | L5/L6       | \$0.24      |
| 8. | MO. INTERCEPT COST PER ACCESS LINE    | L7/12       | \$0.02      |

# UNBUNDLED PORT INTERCEPT OPERATOR SERVICES WAGES & EXPENSES

| A. | 2140 INTERCEPT - OPERATORS   |           |     | \$101,000 |
|----|--|-----------|-----|-----------|
| 8. | 2141 INTERCEPT - SUPERVISION AND ASSISTANCE  |           |     | \$28,000  |
| C. | 2142 OPERATOR SERVICES CLERICAL - INTERCEPT  | •         |     | \$3,000   |
| D. | 2146 INTERCEPT OPERATOR REFERENCE SOURCE   | - MTCE.   | • • | \$109.000 |
| E. | 2147 INTERCEPT OPERATOR REFERENCE SOURCE<br>MAINTENANCE SUPERVISION AND ASSISTANCE | •         |     | \$56,000  |
| F. | TOTAL INTERCEPT WAGES AND EXPENSES (A++E   | )         |     | \$297,000 |
| G. | PERCENT ASSIGNED TO LOCAL  |           |     | 0.757354  |
|    | TOTAL INTERCEPT WAGES & EXPENSES ASSIGNED TO LOCAL (1993)                          | )<br>F*G  |     | \$224,934 |
| F. | TOTAL 1996 INTERCEPT EXPENSES-TPI  | (H*1.144) |     | \$257,423 |

#### PROPRIETARY

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### UNBUNDLED PORT INTERCEPT TRUNK MILEAGE COST

| 1. AUTOMATIC INTERCEPT TRUNK MILES   | ENGR STUDY      | 88,309   |
|--------------------------------------|-----------------|----------|
| 2. INVESTMENT PER MILE DS0 845C      | FIC STUDY, L40  | \$0.16   |
| 3. INVESTMENT PER MILE DS0 4C        | FIC STUDY, L41  | 0.09     |
| 4. INVESTMENT PER MILE DS0 85C       | FIC STUDY, L42  | 0.18     |
| 5. INVESTMENT PER MILE DS0 357C      | FIC STUDY, L45  | 0.52     |
| 6. ANNUAL COST FACTOR (ACF) 845C     |                 | 0.1898   |
| 7. ANNUAL COST FACTOR (ACF) 4C       |                 | 0.1447   |
| 8. ANNUAL COST FACTOR (ACF) 85C      |                 | 0.1969   |
| 9. ANNUAL COST FACTOR (ACF) 357C     |                 | 0.3137   |
| 10. ANNUAL COST OF INTERCEPT MILEAGE | SUM(Mi*Inv*ACF) | \$21,367 |
| 11. PERCENT ASSIGNED TO LOCAL        | SIS-PC          | 0.757354 |
| 12. ANNUAL COST OF INTERCEPT MILEAGE | L10*L11         | \$16,182 |

### UNBUNDLED PORT INTERCEPT CXR TERMINATIONS

| 1. AUTOMATIC INTERCEPT TRUNKS    | ENGR STUDY     | 2,770             |
|----------------------------------|----------------|-------------------|
| 2. NO. OF CXR TERMINATIONS       | 2*L1           | 5,540             |
| 3. INVESTMENT PER TERMINATION    | FIC STUDY, L14 | \$504.28          |
| 4. ANNUAL COST FACTOR 357C       |                | 0.3137            |
| 5. TOTAL ANNUAL COST             | L2*L3*L4       | \$876,387         |
| 6. PERCENT ASSIGNED TO LOCAL     | SIS-PC         | 0.757354          |
| 7. INTERCEPT COST ASSIGNED LOCAL | L57L6          | <b>\$</b> 663,735 |

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### UNBUNDLED PORT THIS INTERCEPT COE SWITCHING EQUIPMENT

| A. 2200 CAT 1Q0 (FRC 117C)<br>(04/95 SIS-PC, SEC A-1, P.1 OF 1, LINE 8I) |     | \$807,396 |
|--|-----|-----------|
| B. 117C CC/BC FACTOR (1994)  |     | 1.009     |
| C. 117C CURRENT INVESTMENT (1994)  | A*B | \$814,663 |
| D. 117C TPI FACTOR 96/94   |     | 0.994     |
| E. 117C INVESTMENT (1996)  | D*C | \$899,775 |
| F. 117C ANNUAL COST FACTOR   |     | 0.3122    |
| G. 117C INTERCEPT ANNUAL COST  | F*E | \$252,812 |

#### CONFIDENTIAL

#### **DIRECTORY EXPENSES**

|                  | - Annual    | Annual    | Exp. Per |
|------------------|-------------|-----------|----------|
| •                | Expenses    | Listings  | Listing  |
| Database         | \$951,200   | 3,631,463 | \$0.26   |
| Directory        | \$1,301,300 | 2,631,231 | 0.49     |
| Annual Expense P | Per Listing |           | \$0.75   |
| Monthly Expense  | Per Listing |           | \$0.06   |

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#### **UNBUNDLED PORTS**

#### OTHER EXPENSE & NONRECURRING COST SUMMARY

|  |                | Source              |
|--|----------------|---------------------|
| A) REGIONAL COSTS - PORTS                            |                |                     |
| 1) Annual Direct Administration Expense - Ports      | \$170,579.16   |                     |
| 2) Annual Expense Per Port                           | \$6.39         | LA1/(72,096*.37020) |
| 3) Monthly Expense Per Port                          | \$0.53         | LA2 / 12            |
| 4) Nonrecurring Costs - Ports                        | \$34,677.46    |                     |
| 5) Annual Cost Per Port                              | \$0.48         | LA4/72,096          |
| 6) Monthly Cost Per Port                             | \$0.04         | LA5 / 12            |
| B) STATE SPECIFIC COSTS - PORTS                      |                |                     |
| 1) Nonrecurring Costs - Ports                        | \$24,248.60    |                     |
| 2) Annual Cost Per Port                              | \$1.68         | LB1 / 14,419        |
| 3) Monthly Cost Per Port                             | \$0.14         | LB2 / 12            |
| C) COSTS PER PORT                                    |                |                     |
| 1) Report Expense Processing Per Port Per Month      | \$0.02         |                     |
| 2) Additional Maintenance Expense Per Port Per Month | \$0.02         |                     |
| 3) Other Monthly Expense per Port                    | \$0.71         | LA3 + LA6 + LB3     |
| 0.7074   | <b>\$</b> 0.75 | 104 1100 1100       |
| 4) TOTAL   | <b>3</b> 0.75  | LC1 + LC2 +LC3      |

#### **UNBUNDLED PORTS**

#### PRODUCT MANAGEMENT EXPENSES

|   | <b>a</b> |                      | b<br>1007          | c≠a*b                                 | d-a*b            |
|---|----------|----------------------|--------------------|---------------------------------------|------------------|
|   | Hours    | Source               | 1997<br>Labor Rate | · · · · · · · · · · · · · · · · · · · | x State Specific |
| 4) 0 4: -4 14                           | DOME     | 3000                 | PERM IVER          | Total                                 | <u>Total</u>     |
| 1) Product Management                   |          |                      |                    |                                       |                  |
| a) Ports - 1 SG 5                       | 2,088    | 174 hrs "12 mos.     | \$66.25            | \$138,330.00                          |                  |
| b) Ports - 25% 1 SG5                    | 522      | 174 hrs *12 mos.*.25 | \$61.78            | \$32,249.16                           |                  |
| c) Total Annual Expense                 |          |                      |                    | \$170,579.16                          |                  |
|   |          |                      |                    | • •                                   |                  |
| 2) Product Management Report Processing | )        |                      |                    |                                       |                  |
| a) Daily Report per Loop/Port           | 0.016667 | Business Unit        | \$32.12            |                                       | \$0.54           |
| b) Monthly Report per Loop/Port         | 0.000649 | Business Unit        | \$32.12            |                                       | \$0.02           |
| c) Report Processing Expense per Loop/P | ort      |                      |                    |                                       | \$0.56           |
| d) A/P @11.5%, 3 Years                  |          |                      |                    |                                       | 0.37020          |
| e) Annual Cost per Loop/Port            |          | (L2c * L2d)          |                    |                                       | \$0.21           |
| f) Monthly Cost per Loop/Port           |          | (L2e / 12)           |                    |                                       | \$0.02           |

## **AMERITECH - MICHIGAN UNBUNDLED PORTS**

#### **NONRECURRING COSTS**

|  | •     | b<br>1996       | c≖e*b<br>State Specific | or  | d≈a*b<br>Regional |
|--|-------|-----------------|-------------------------|-----|-------------------|
|  | Hours | Labor Rate      | <u>Iotal</u>            | G   | <u>Total</u>      |
| A) BUIL - A Contact Brown and Contact                    |       |                 |                         |     |                   |
| 1) Billing System Reprogramming                          |       |                 |                         |     |                   |
| - ACIS / CRIS  | 105   | 362.41          | te sea os               |     |                   |
| a) SG 4  | 315   | \$56.17         | \$6,553.05              |     |                   |
| b) SG 3  | 315   | <b>\$30.</b> 17 | \$17,693.55             |     |                   |
| c) Total   |       |                 | \$24,246.60             | , . | •                 |
| Methods and Procedures (M&P)    Development and Training |       |                 |                         |     |                   |
| - Network  |       |                 |                         |     |                   |
| a) SG 3  | 250   | \$56.17         |                         |     | \$14,042.50       |
| b) Total   |       |                 |                         |     | \$14,042.50       |
| 3) Integrated Testing                                    |       |                 |                         |     |                   |
| a) SG 3  | 350   | <b>\$56.17</b>  |                         |     | \$19,659.50       |
| b) Total   |       |                 |                         |     | \$19,659.50       |
| 4) Methods and Procedures (M&P)                          |       |                 |                         |     |                   |
| - Development and Training                               |       |                 |                         |     |                   |
| -Service Center  |       |                 |                         |     |                   |
| a) SG 3  | 19 ** | \$51.34         |                         |     | \$975.46          |
| b) Total   | •     |                 |                         |     | \$975.46          |
| 5) Total Nonrecurring Cost                               |       |                 | \$24,246.60             |     | \$34,677.46       |

\*Source: Tab 14.3 \*\* Source: Tab 14.5

#### **UNBUNDLED PORTS**

#### **ADDITIONAL MAINTENANCE EXPENSE**

#### Source

| 1) Additional Time per Port Trouble Report    |                     |                |
|---|---------------------|----------------|
| - Unbundling Service Center                   | Network             | 8 minutes      |
| 2) Additional Expense per Port Trouble Report |                     | ••             |
| - Unbundling Service Center                   | (L1 / 60) * \$41.32 | <b>\$5</b> .51 |
| 3) Annual % of Occurrence of Trouble          | Network             | 4.00%          |
| 4) Additional Annual Expense per Port         | (Sum L2 * L3)       | \$0.22         |
| 5) Monthly Expense per Port                   | L4/12               | \$0.02         |

#### MICHIGAN

### CTX COMMON BLOCK TRANSLATION MELD

| Line | INITIAL    | INST.     |         |    | MELD   | REMOV.    | MELD      |
|------|------------|-----------|---------|----|--------|-----------|-----------|
| 1    | 5 <b>E</b> | \$ 206.40 | 0.3281  | \$ | 67.72  | \$ 156.59 | \$ 51.38  |
| 2    | DMS        | \$207.15  | 0.5707  | \$ | 118.22 | \$ 112.25 | \$ 64.06  |
| 3    | EWSD       | \$398.90  | 0.1012  | \$ | 40.37  | \$ 302.61 | \$ 30.62  |
|      |            |           |         |    |        |           |           |
| 4    |            | SUB. TOTA | L=      | \$ | 226.31 |           | \$ 146.06 |
|      |            |           |         |    |        | _         |           |
| 5    | PW/FA=     | 0.80436   | × 146.6 | 6  | = 117. | 49        |           |
|      |            |           |         |    |        |           |           |
|      |            |           |         |    |        |           |           |
| 6    | INST.=     | \$ 226.31 |         |    |        |           |           |
| 7    | REMOV.=    | \$ 117.49 |         |    |        |           |           |
| 8    | TOTAL=     | \$ 343.80 |         |    |        |           |           |

NonVolume Sensitive Cost \$ 1.82

#### CONFIDENTIAL

#### NONRECURRING COSTS

#### COMMON BLOCK TRANSLATION COST DEVELOPMENT

| Line       |                      |            |                 | State     |    | ourly  |              |                        |
|------------|----------------------|------------|-----------------|-----------|----|--------|--------------|------------------------|
| l-stall t  | Switch<br>1996 Labor | Work Group | Description     | Performed | E  | Rate   | <u>Hours</u> | Cost                   |
| Install :  | 1996 Labor<br>DMS    | P430X      | I&M(COE)        | IN        | •  | 41.43  |              |                        |
|            | DIVIG                | F430X      | Writer          | 111       | Ψ  | 71.70  | 2.5          | \$ 103.58              |
| 2 3        |                      |            | Typist          |           |    |        | 2.5          | \$ 103.58              |
| 4          |                      |            | •               |           |    |        |              | \$ 207.15              |
| •          |                      |            |                 |           |    |        | • •          | <b>V 20</b> 1110       |
| 5          | 5 <b>E</b>           | P430X      | I&M(COE)        | IL        | \$ | 41.28  |              |                        |
| 6          |                      |            | Writer          |           |    |        | 2.5          | \$ 103.20              |
| 7          |                      |            | Typist          |           |    |        | 2.5          | \$ 103.20              |
| 8          |                      |            |                 |           |    |        |              | \$ 206.40              |
|            |                      | <b>D</b>   |                 |           |    |        |              |                        |
| 9          | EWSD                 | P430X      | I&M(COE) Writer | WI        | \$ | 39.89  | 6.0          | \$ 239.34              |
| 10<br>11   |                      |            | Typist          |           |    |        | 6.0<br>4.0   | \$ 239.34<br>\$ 159.56 |
|            |                      |            | i y pist        |           |    |        | 4.0          |                        |
| 12         |                      |            |                 |           |    |        |              | \$ 398.90              |
| Remove :   | 1998 Labo            | r Rate     |                 |           |    |        |              |                        |
| 13         | DMS                  | P430X      | I&M(COE)        | IN        | \$ | 44.90  |              |                        |
| 14         |                      |            | Writer          |           |    |        | 1.5          | \$ 67.35               |
| 15         |                      |            | Typist          |           |    |        | 1.0          | \$ 44.90               |
| 16         |                      |            |                 |           |    |        |              | \$ 112.25              |
|            |                      |            |                 |           |    |        |              |                        |
| 17         | 5E                   | P430X      | I&M(COE)        | IL        | \$ | 44.74  | 4.0          | e 44.74                |
| 18         |                      |            | Writer          |           |    |        | 1.0<br>2.5   | \$ 44.74<br>\$ 111.85  |
| 19         |                      |            | Typist          |           |    |        | 2.5          |                        |
| 20         |                      |            |                 |           |    |        |              | \$ 156.59              |
| 21         | EWSD                 | P430X      | I&M(COE)        | WI        | \$ | 43.23  |              |                        |
| 22         | 21100                | 1 7007     | Writer          | * * 1     | •  | -TU.20 | 4.0          | \$ 172.92              |
| 23         |                      |            | Typist          |           |    |        | 3.0          | \$ 129.69              |
| 24         |                      |            | ••              |           |    |        |              | \$ 302.61              |
| <b>-</b> T |                      |            |                 |           |    |        |              | •                      |

#### CONFIDENTIAL

#### **NONRECURRING COSTS**

#### MICHIGAN

| Line | TRUNK PO                | RT TRANS | LATION M    | ELD        |            |             |          |
|------|-------------------------|----------|-------------|------------|------------|-------------|----------|
| 1    |                         |          |             |            | PW/FA      | 0.80436     |          |
|      | INSTALL                 | RATIO    | MELD        | REMOVE     | MELD       | 1           |          |
| 2    | 5E \$ 288.96            | 0.3312   | \$ 95.70    | \$ 313.18  | \$ 103.73  | •           |          |
| 3    | <b>DMS</b> \$ 290.01    | 0.5722   | \$ 165.94   | \$ 314.30  | \$ 179.84  | • •         | •        |
| 4    | EWSD \$ 279.23          | 0.0966   | \$ 26.97    | \$ 302.61  | \$ 29.23   |             |          |
| 5    |                         |          | \$ 288.62   |            |            | +251.60     | PW       |
|      | usc                     |          | TIME        | RATE       | COST       |             |          |
| 6    | Pre Service Setup       |          | 0.250       | \$ 41.32   | \$ 10.33   |             |          |
| 7    | Verify & Release Order  | 7        | 0.167       | \$ 41.32   | \$ 6.90    |             |          |
| 8    | Reverify & Close Order  |          | 0.083       | \$ 41.32   | \$ 3.43    |             |          |
| 9    | Disconnect Order        |          | 0.083       | \$ 41.32   | \$ 3.43    |             |          |
| 10   |                         | Total    |             |            | \$ 24.09   |             |          |
|      |                         | 1 Otal   |             |            | 7 24.00    |             |          |
| 11   | INSTALL \$ 288.62       |          |             |            |            |             |          |
| 12   | REMOVE \$ 251.60        |          |             |            |            |             |          |
| 13   | USC \$ 24.09            |          |             |            |            |             |          |
| 14   | TOTAL \$ 564.31         | NonV     | olume Sen   | sitive Cos | it \$ 2.9  | 18          |          |
|      | SUBSEQUENT CHAN         |          | <b>-</b> 0. |            | TIME       | RATE        | COST     |
|      | Centralized Translation |          |             |            |            |             |          |
| 15   |                         |          | Trunk Grou  | 1 <b>b</b> |            | \$ 42.93    | \$ 14.30 |
| 16   | Disconnec               | t Order  |             |            | 0.167      | \$ 42.93    | \$ 7.17  |
| 17   | Total                   |          |             |            |            |             | \$ 21.47 |
|      |                         |          |             | NonVol     | ume Sensii | tive Cost S | 0.15     |

#### **NONRECURRING COSTS**

#### MICHIGAN

Line TRUNK TRANSLATION DEVELOPMENT

|          |               |                     | •                                       | State     | Hourly   |       |                  |
|----------|---------------|---------------------|---|-----------|----------|-------|------------------|
|          | <u>Switch</u> | Work Group          | Description                             | Performed | Rate     | Hours | Cost             |
| install: | 1996          | Labor Rate          |   |           |          |       |                  |
| 1        | DMS           | P430X               | I&M(COE)                                | IN        | \$ 41.43 |       |                  |
| 2        |               |                     | Writer                                  |           |          | 4.0   | \$ 165.72        |
| 3        |               |                     | Typist                                  |           |          | 3.0   | \$ 124.29        |
| 4        |               |                     |   |           |          |       | \$ 290.01        |
|          |               |                     |   |           |          |       |                  |
| 5        | 5E            | P430X               | I&M(COE)                                | IL        | \$ 41.28 | • •   |                  |
| 6        | 32            | 1 400%              | Writer                                  |           | 4 41.20  | 4.0   | \$ 165.12        |
| 7        |               |                     | Typist                                  |           |          | 3.0   | \$ 123.84        |
| 8        |               |                     | • •                                     |           |          |       | \$ 288.96        |
| Ū        |               |                     |   |           |          |       | <b>V 200</b> .00 |
|          |               |                     |   |           |          |       |                  |
| 9        | EWSD          | P430X               | I&M(COE)                                | M         | \$ 39.89 |       |                  |
| . 10     |               |                     | Writer                                  |           |          | 4.0   | 159.56           |
| 11       |               |                     | Typist                                  |           |          | 3.0   | <u>119.67</u>    |
| 12       |               |                     |   |           |          |       | 279.23           |
| B        | 4000          | Labor Bata          |   |           |          |       |                  |
| Remove:  | 1998<br>DMS   | Labor Rate<br>P430X | I&M(COE)                                | IN        | \$ 44.90 |       |                  |
| 14       | בואום         | F430A               | Writer                                  | 114       | Ψ50      | 4.0   | \$ 179.60        |
| 15       |               |                     | Typist                                  |           |          | 3.0   | \$ 134.70        |
| 16       |               |                     | .,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |           |          |       | \$ 314.30        |
|          |               |                     |   |           |          |       |                  |
|          |               |                     |   |           |          |       |                  |
| 17       | 5E            | P430X               | I&M(COE)                                | ) IL      | \$ 44.74 |       |                  |
| 18       |               |                     | Writer                                  | •         |          | 4.0   | \$ 178.96        |
| 19       |               | •                   | Typist                                  |           |          | 3.0   | <u>\$ 134.22</u> |
| 20       |               |                     |   |           |          |       | \$ 313.18        |
|          |               |                     |   |           |          |       |                  |
| 21       | EWSD          | P430X               | I&M(COE                                 | ) WI      | \$ 43.23 |       |                  |
| 22       | L 1 13 D      | F-30X               | Writer                                  | , •••     |          | 4.0   | \$ 172.92        |
| 23       |               |                     | Typist                                  |           |          | 3.0   | \$ 129.69        |
| 24       |               |                     | , , , , , ,                             |           |          |       | \$ 302.61        |
| <b>-</b> |               |                     |   |           |          |       |                  |

#### CONFIDENTIAL

### UNIQUE LINE CLASS CODE (LCC) MICHIGAN

| <b>~.</b><br>₹ 7           | <u>5E</u>   | DMS          | EWSD        | TOTAL        |
|----------------------------|-------------|--------------|-------------|--------------|
| # of Offices               | 154         | 164          | 68          | 386          |
| CTG hours per Switch       | 5.5         | 3            | 3           |              |
| Cost per hour              | \$ 42.93    | \$ 43.09     | \$ 41.48    |              |
| CTG cost per Technology    | \$36,361.71 | \$ 21,200.28 | \$ 8,461.92 | \$ 66,023.91 |
| SILTesting hours per Tech. | 1.5         | 1.5          | 1.5         |              |
| Testing costs              | \$ 231.00   | \$ 246.00    | \$ 102.00   | \$ 579.00    |
| Total cost per technology  | \$36,592.71 | \$ 21,446.28 | \$ 8,563.92 | \$ 66,602.91 |

Per LCC, per Switch

\$ 202.44

NonVolume Sensitive Cost \$

1.07

#### **MICHIGAN Unbundled Port - Nonrecurring Costs Unbundled Port**

| # Dieco | anned Dres       |              | onversion    |                | -\$3.84              | ONNECTION                         | N TOTAL           | \$47.30<br>43.46     | NonVolume Sensitive Cost S 0.25 0.23  |
|---------|------------------|--------------|--------------|----------------|----------------------|-----------------------------------|-------------------|----------------------|---|
| BSC     | 32.12            | 2            |              |                | 30.00                | 10.00%                            | 3.00              | 1.61                 | CONTACT AEC IF ANY SERV-<br>ICE ORDER ERRORS  |
| CTG     | 43.65            | i            |              |                | 60.00                | 20.00%                            | 12.00             | 8.73                 | TRANSLATIONS  |
| CPC     | 34.76            |              |              |                | 30.00                | 10.00%                            | 3.00              | 1.74                 | FALL OUT ORDERS ONLY<br>NEED TO CHECK ERROR<br>AND RESUBMIT OR DO A<br>SPECIAL DESIGN |
| NAC     | 40.75            |              |              |                | 6.00<br>90.00<br>NAC |                                   | 6.00<br>0.90<br>L | 4.08<br>0.61<br>4.69 | ASSIGN OE PROBLEM RESOLUTION  |
|         |                  |              |              |                |                      | SUBTOTAL                          | _                 | 17.15                |   |
| usc     | 41.32<br>47.24   |              |              |                | 23.00                | 100.00%                           | 23.00<br>2.30     | 15.84<br>1.31        | COORDINATING # DISCONNECT   |
| LAC     | 38.14            |              |              |                | 15.00                | 100.00%                           | 15.00             | 9.54                 | MANUAL ASSIGNMENT   |
|         |                  |              |              |                | C                    | OF SUBTO                          | TAL               | 3.84                 |   |
| COF     | \$33.16<br>37.91 |              |              |                | 5.00<br>2.50         | 100.00%<br>95.00%                 | 5.00<br>2.38      | \$2.76<br>1.08       | ŘÚN JUMPER<br># DISCONNECT  |
| LINE    | CONNECT          | TON CO       | ST           | N              | onVolur              | ne Sensit                         | rve Cost :        | 6.0                  |   |
|         |                  |              |              |                |                      |                                   |                   |                      | 7   |
|         |                  |              |              |                | SED/ACE              | ORDER TO                          | OTA!              | \$12.34              |   |
|         | 36.72            |              |              |                | #                    | MACHINE (<br>DISCONN<br>MACHINE ( | 5.00              | 4.33<br>2.21<br>3.12 | LOG-IN, SCREEN, RESOLVE<br>DISCREPANCY, FORMAT,<br>ENTER AND DISTRIBUTE.              |
| BSC     | \$32.12          |              |              |                | 5.00                 | 100.00%<br>100.00%                | 0.00<br>5.00      | \$0.00<br>\$2.68     | BILLING ADJUSTMENT PROCESS ORDER  |
| SERV    | ICE ORDE         | RING CO      | OST          |                |                      |                                   |                   |                      |   |
| GROUP   | RATE             | MINS         | MINS         | TIME           | MINS                 | OCCUR                             | (E*F)             | (G/60°A)             |   |
| WORK    | LABOR            | MIN.<br>TIME | MAX.<br>TIME | MOST<br>LIKELY | AVE<br>TIME          | PROB<br>OF                        | WTD<br>MINS       | COST                 |   |
|         |                  | В            | С            | D              | E                    | F                                 | G                 |                      |   |

CTX ATTEND'T CONSOLE PORT"= 2 x 47.30 = 494.60 0.50

NonVolume Sensitive Cost \$

# DUE TO COMPLEXITY OF CONSOLE EQUIPMENT - MORE LINE CARDS ETC. CONFIDENTIAL

Solely for use by employees of Ameritech companies who have a need to know. Not to be disclosed to or used by any other person without prior authorization.

#### **MICHIGAN**

Order Type:

RECORD ONLY

| Flowchart | 1996<br>Labor<br><u>Rate</u> | Weighted<br>Mean<br><u>Time</u> | A<br>Order   | B<br>Line | C<br>Cust Prem | Total | Description   |
|-----------|------------------------------|---------------------------------|--------------|-----------|----------------|-------|---|
| BSC       | \$38.81<br>\$30.64           | 0.20<br>0.01                    | 7.76<br>0.31 | 0.00      |                |       | Business Service Center (2870)<br>Service Order Correction (2330) |

Computer Svc Ord process cost \$4.74

Total Cost \$12.81 \$0.00 \$0.00 \$12.81

Service Order
Line Connection

\$12.81 NonVolume Sensitive Cost \$ 0.0

\$0.00

#### CTX SYSTEM CHANGE AND REARRANGEMENT/SYSTEM ACTIVATION

| 5E LABOR RATE 1997   | \$<br>42.565 | SYSTEM CHIREARR HIRS   | 1 18 |             |
|----------------------|--------------|------------------------|------|-------------|
| DMS LABOR RATE 1997  | \$<br>41.865 |                        |      |             |
| EWSD LABOR RATE 1997 | \$<br>40.090 | SYSTEM ACTIVATION HRS. |      | ,, <b>4</b> |
|                      |              | INSTALL                | 3.5  | ` <i>!</i>  |
|                      |              | REMOVE                 | 1.21 |             |

#### MELD

|            | MICHIGA |
|------------|---------|
| 5 <b>E</b> | 0.3321  |
| DMS        | 0.5737  |
| EWSD       | 0.0942  |

#### CTX SYSIEM CHANGE/REARRANGE

|      |    |       | MIC | HIGAN   |
|------|----|-------|-----|---------|
| 5E   | \$ | 50.23 | \$  | 16.68   |
| DMS  | \$ | 49.40 | \$  | 28 34   |
| EWSD | \$ | 47.31 | \$  | 0 55    |
|      | T  | OTAL  | \$  | (45.57) |

NonVolume Sensitive Cost \$ 0.24

|                 | CLY STATEMUNITYDING |        |             |  |  |
|-----------------|---------------------|--------|-------------|--|--|
|                 | it                  | NSTALL | MICHIGAN    |  |  |
| 5E              | \$                  | 148.98 | \$ 49.48    |  |  |
| DMS             | \$                  | 146.53 | \$ 84.06    |  |  |
| EWSD            | \$                  | 140 32 | \$ 13.22    |  |  |
| TOTAL<br>REMOVE |                     |        | \$ (146.76) |  |  |
|                 |                     |        | +           |  |  |
| 5E              | \$                  | 54.14  | \$ 17.98    |  |  |
| DMS             | \$                  | 54.33  | \$ 31 17    |  |  |
| EWSD            | \$                  | 52.31  | \$ 4.93     |  |  |
|                 | TOT                 | AL.    | \$ 54 07    |  |  |
| 0.8043          | 6 PW/F              | Α      | (43.50)     |  |  |

CONFIDENTIAL NonVolume Sensitive Cost \$ 1.00

USAGE BILLING DEVELOPMENT

HOURLY

 RATE
 HOURS
 COST

 CAMPS/ACIS
 \$ 75.00
 750
 \$ 56.250.00

CABS \$ 100.00 1200 \$ 120,000.00

TOTAL \$ 176,250.00

25

Forecasted number of customers

Cost per Customer \$ 7.050.00

TRUNK ORDERING DEVELOPMENT

Per trunk type \$ 56.97 832 \$ 47,399.04

Number of trunk types 10 \$ 473,990.40

Number of customers 25

Cost per Customer \$ 18.959.62

TOTAL \$ 26.009.62

NonVolume Sensitive Cost \$ 137.35

# CUSTOMER TRAINING

RC A26XX-XXXX

1997 \$ 58.98 SG 3

NonVolume Sensitive Cost \$ 0.31

Used for the following function: Customer Training. 1HR

PROPRIETARY

The information contained herein should not be disclosed to unauthorized persons. It is meant solely for use by authorized Ameritash employees.

### Ameritech -Michigan Unbundled Switching Cost Study

#### **Unbundled Switching**

#### Usage Cost Calculations - Michigan

|    | Description                 | Pe          | r Message | Source             |
|----|-----------------------------|-------------|-----------|--------------------|
|    | Intraswitch Call            |             |           |                    |
|    | Setup                       |             |           |                    |
| 1  | Switching                   | <b>\$</b> . | 0.001596  |                    |
| 2  | SS7                         | \$          | 0.000113  |                    |
| 3  | Measurement (AMA)           | \$          | 0.000118  |                    |
| 4  | Expense                     | \$          | 0.001740  |                    |
| 5  | Total Setup                 | \$          | 0.003567  | SUM(L1L4)          |
|    | Duration                    |             |           |                    |
| 6  | EO - IAO per Min.           | \$          | 0.001600  | • •                |
| 7  |                             |             | 3.280     | Product Management |
| 8  | Total Message Duration Cost | \$          | 0.005248  | L6*L7              |
| 9  | Total Cost per Message      | \$          | 0.008815  | L5+L8              |
| 10 | Cost Per Average Minute     | \$          | 0.002688  |                    |

NonVolume Sensitive Cost \$

0.000014